

WHAT IS CLAIMED IS:

1. A communication apparatus comprising:

data-transmitting means for transmitting real-time data through a communication network;

data-receiving means for receiving data representing data-loss rate, from a data-receiving side to which the data-transmitting means transmits the real-time data;

and

rate control means for comparing the data-loss rate with preset first and second threshold values, increasing a transfer rate at which the data-transmitting means transmits the real-time data, when the data-loss rate is lower than both the first threshold value and the second threshold value, not changing the transfer rate when the data-loss rate is higher than the first threshold value and lower than the second threshold value, and decreasing the transfer rate when the data-loss rate is higher than both the first threshold value and the second threshold value.

2. The communication apparatus according to claim 1, wherein the rate control means comprises counting means for setting the first threshold value at a value other than zero and for counting the number of times the data-loss rate corresponds to a first state in which the data-loss rate ranges from zero to the first threshold value, a second state in which the data-loss rate ranges from the first threshold value to the second threshold value, or a third state in which the data-loss rate exceeds the second threshold value, and the rate control means determines whether the data-loss rate

corresponds to the first data-loss state, the second data-loss state or the third data-loss state in accordance with a count obtained by the counting means and controls the transfer rate in accordance with the data-loss state thus determined.

3. A communication method comprising:

receiving data representing data-loss rate, from a data-transmitting side, while

real-time data is being transmitted through a communication network;

comparing the data-loss rate with preset first and second threshold values; and

increasing a transfer rate at which the real-time data is transmitted, when the data-loss rate is lower than both the first threshold value and the second threshold value, not changing the transfer rate when the data-loss rate is higher than the first threshold value and lower than the second threshold value, and decreasing the transfer rate when the data-loss rate is higher than both the first threshold value and the second threshold value.

4. The communication method according to claim 3, wherein the first threshold value is set at a value other than zero, the number of times the data-loss rate corresponds to a first state in which the data-loss rate ranges from zero to the first threshold value, a second state in which the data-loss rate ranges from the first threshold value to the second threshold value or a third state in which the data-loss rate exceeds the second threshold value is counted, whether the data-loss rate corresponds to the first data-loss state, the second data-loss state or the third data-loss state is determined in accordance with a count obtained by the counting means, and

the transfer rate is controlled in accordance with the data-loss state thus determined.